

section), the employer must not allow the individual to continue working as a signal person until re-training is provided and a re-assessment is made in accordance with paragraph (a) of this section that confirms that the individual meets the Qualification Requirements.

(c) *Qualification Requirements.* Each signal person must:

(1) Know and understand the type of signals used. If hand signals are used, the signal person must know and understand the Standard Method for hand signals.

(2) Be competent in the application of the type of signals used.

(3) Have a basic understanding of equipment operation and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads.

(4) Know and understand the relevant requirements of §1926.1419 through §1926.1422 and §1926.1428.

(5) Demonstrate that he/she meets the requirements in paragraphs (c)(1) through (4) of this section through an oral or written test, and through a practical test.

§ 1926.1429 Qualifications of maintenance & repair employees.

(a) Maintenance, inspection and repair personnel are permitted to operate the equipment only where all of the following requirements are met:

(1) The operation is limited to those functions necessary to perform maintenance, inspect the equipment, or verify its performance.

(2) The personnel either:

(i) Operate the equipment under the direct supervision of an operator who meets the requirements of §1926.1427 (Operator qualification and certification); or

(ii) Are familiar with the operation, limitations, characteristics and hazards associated with the type of equipment.

(b) Maintenance and repair personnel must meet the definition of a qualified person with respect to the equipment and maintenance/repair tasks performed.

§ 1926.1430 Training.

The employer must provide training as follows:

(a) *Overhead powerlines.* The employer must train each employee specified in §1926.1408(g) and §1926.1410(m) in the topics listed in §1926.1408(g).

(b) *Signal persons.* The employer must train each employee who will be assigned to work as a signal persons who does not meet the requirements of §1926.1428(c) in the areas addressed in that paragraph.

(c) *Operators.*

(1) *Operators-in-Training for equipment where certification or qualification is required by this subpart.* The employer must train each operator-in-training in the areas addressed in §1926.1427(j). The employer must provide re-training if the operator-in-training does not pass a qualification or certification test.

(2) *Transitional Period.* During the four-year phase-in period for operator certification or qualification, as provided in §1926.1427(k), employers must train each operator who has not yet been certified or qualified in the areas addressed in §1926.1427(j).

(3) *Operators excepted from the requirements of §1926.1427.* The employer must train each operator excepted under §1926.1427(a) from the requirements of §1926.1427 on the safe operation of the equipment the operator will be using.

(4) The employer must train each operator of the equipment covered by this subpart in the following practices:

(i) On friction equipment, whenever moving a boom off a support, first raise the boom a short distance (sufficient to take the load of the boom) to determine if the boom hoist brake needs to be adjusted. On other types of equipment with a boom, the same practice is applicable, except that typically there is no means of adjusting the brake; if the brake does not hold, a repair is necessary. See §1926.1417(f) and (j) for additional requirements.

(ii) Where available, the manufacturer's emergency procedures for halting unintended equipment movement.

(d) *Competent persons and qualified persons.* The employer must train each competent person and each qualified person regarding the requirements of this subpart applicable to their respective roles.